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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/762,228	01/21/2004	Scott Fast	0739D-000104	2198
27572	7590	09/28/2005	EXAMINER	
HARNESS, DICKEY & PIERCE, P.L.C.			EDEL, JOSEPH F	
P.O. BOX 828			ART UNIT	
BLOOMFIELD HILLS, MI 48303			PAPER NUMBER	

3636

DATE MAILED: 09/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/762,228

Applicant(s)

FAST, SCOTT

Examiner

Joseph F. Edell

Art Unit

3636

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 July 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11 and 13-25 is/are rejected.
- 7) ☒ Claim(s) 12 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 January 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 02/19/2004.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

1. Applicant's timely traversal, filed 18 July 2005, of the restriction requirement is persuasive. Restriction requirement is withdrawn.

Drawings

2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: 12. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.
3. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character "64" has been used to designate both the locking cam (Fig. 3) and the post (Fig. 4). Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures

Art Unit: 3636

appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

4. Claims 7, 8, 19, and 23-35 are objected to because of the following informalities:
- a. claim 7, line 2, "said main cam" should read --said first pawl--
 - b. claim 8, lines 3-4, "14-22^o" should read --14-22 degrees--;
 - c. claim 19, line 3, "said first and second positions" should read --said locked and unlocked positions--;
 - d. claim 23, line 4, "hosing" should read --housing--;
 - e. claim 24, line 4, "fist" should read --first--;
 - f. claim 25, line 2, "14-22^o" should read --14-22 degrees--.

Appropriate correction is required.

Double Patenting

5. A rejection based on double patenting of the "same invention" type finds its support in the language of 35 U.S.C. 101 which states that "whoever invents or discovers any new and useful process ... may obtain a patent therefor ..." (Emphasis added). Thus, the term "same invention," in this context, means an invention drawn to identical subject matter. See *Miller v. Eagle Mfg. Co.*, 151 U.S. 186 (1894); *In re*

Art Unit: 3636

Ockert, 245 F.2d 467, 114 USPQ 330 (CCPA 1957); and *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970).

A statutory type (35 U.S.C. 101) double patenting rejection can be overcome by canceling or amending the conflicting claims so they are no longer coextensive in scope. The filing of a terminal disclaimer cannot overcome a double patenting rejection based upon 35 U.S.C. 101.

6. Claims 1-25 are provisionally rejected under 35 U.S.C. 101 as claiming the same invention as that of claims 1-17 and 24-31 of copending Application No. 10/930,045.

This is a provisional double patenting rejection since the conflicting claims have not in fact been patented.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 1-3, 6-11, 18, and 22-25 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 4,997,223 to Croft.

Croft discloses a recliner assembly that includes all the limitations recited in claims 1-3, 6-11, 18, and 22-25. Croft shows a recliner assembly having a first housing plate 33 (see Fig. 2), a second housing plate 23 rotatably support by the first housing plate, first and second pawls 36 that are each movable between a locked position engaging the second housing plate to prohibit rotation of the second housing plate relative to the first housing plate and an unlocked position disengaged from the second

Art Unit: 3636

housing plate to enable rotation of the second housing plate relative to the first housing plate, first and second locking cams 26 that are each rotatably supported by the first housing plate, a main cam 29 rotatably supported by the first housing plate, a biasing member 46 acting on the main cam to bias the main cam into engagement with the first locking cam to thereby urge the first pawl into the locked position, an engagement face (see Diagram A below) of the first locking cam that is formed at an angular relationship with the first pawl, first and second engagement arms/extensions (see Diagram A below) of the main cam, a gap disposed between the first and second pawls and the main cam when the first and second pawls are in the locked position, and first and second arms 42,43 of the first pawl with a recess formed therebetween wherein the recliner assembly is supported by a seat bottom and back configuration, the first pawl is operable to apply a primary force to the second housing plate in a locked position with a first force component normal to the engagement of the pawl and the second housing plate and a second force component perpendicular to the first force component, the locking cams are operable to engage the pawls to urge the pawls into the locked position in response to rotation of the main cam, the main cam is operable to selectively rotate the first locking cam into engagement with the first pawl to urge the first pawl into the locked position, the engagement face is operable to selectively receive the first pawl and to apply the primary force to the first pawl at an angle between 14-22 degrees, the first engagement arm of the main cam is in contact with the first pawl to selectively toggle the pawl between the locked and unlocked positions and the second engagement arm is positioned at a predetermined distance from the first pawl when the

Art Unit: 3636

first pawl is in the locked position, the gap is operable to allow interaction (via the locking cams) between the first and second pawls and the main cam to further lock the first housing plate to the second housing plate when a predetermined load is applied to the seat bottom or the seat back, the first locking cam is operable to engage the first arm of the first pawl to urge the first pawl into the locked position, and the second arm/extension of the locking cam is spaced a distance from the second arm of the first pawl when the first pawl is in the locked position.

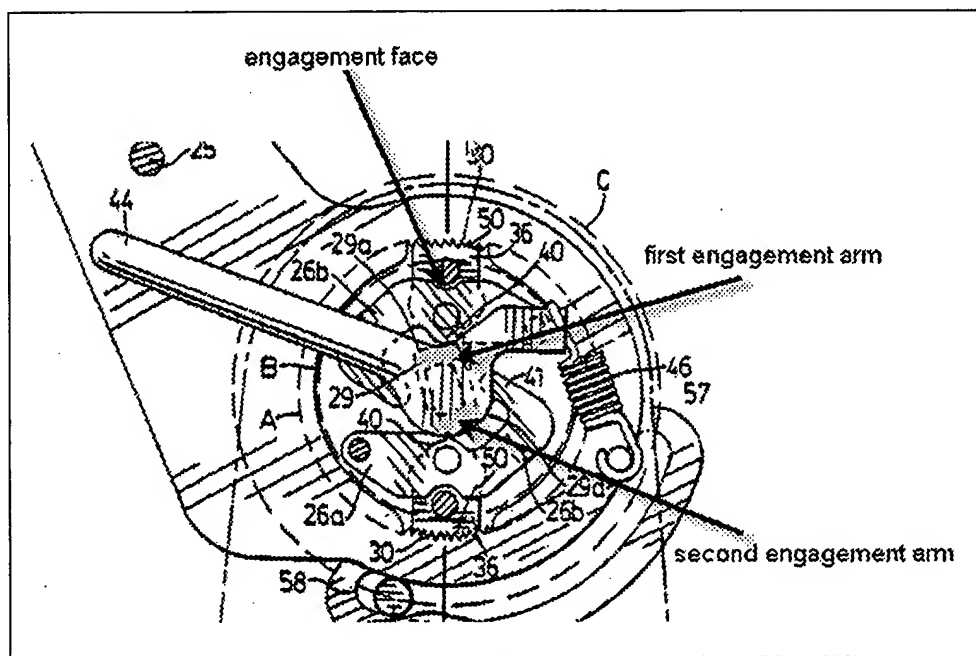


Diagram A - Annotated Figure 3 of Croft

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and

Art Unit: 3636

the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 4, 5, 13, 14, and 19-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Croft in view of U.S. Patent No. ^{4,143,905} [REDACTED] to Hensel et al.

REW
9/23/05

Croft discloses a recliner assembly that is basically the same as that recited in claims 4, 5, 13, 14, and 19-21 except that the assembly lacks a release cam, as recited in the claims. See Figure 2 of Croft for the teaching that the recliner assembly is selectively toggled between the locked and unlocked positions in response to an external force applied to a handle 44. Hensel et al. shows a recliner assembly similar to that of Croft wherein the pawls 31 (Fig. 5) engage a release cam 22 (Fig. 4) rotatably supported by a housing plate 21 (Fig. 2) and operable to toggle the pawls between locked and unlocked positions, a cam surface 36 (see Fig. 4) of the release cam slidably engages the pawls to toggle the pawls between the locked and unlocked positions, and a handle 23 coupled to the release cam to selectively toggle the recliner assembly between the locked and unlocked positions in response to an external force applied to the handle. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the recliner assembly of Croft such that the recliner assembly has a release cam rotatably supported by the first housing plate and operable to toggle the first pawl between the locked and unlocked positions, a cam surface of the release cam slidably engaging the first pawl to toggle the first pawl between the locked and unlocked position, and the handle is coupled to the release cam to selectively toggle the release cam between the locked and unlocked positions in response to an external force applied thereto, such as the recliner assembly

disclosed in Hensel et al. One would have been motivated to make such a modification in view of the suggestion in Hensel et al. that a release cam engaging projecting pins of the pawls provides surfaces on the release cam that actively urge the pawls inwardly toward the unlocked position.

11. Claims 15 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Croft in view of U.S. Patent No. 4,770,464 to Pipon et al.

Croft discloses a recliner assembly that is basically the same as that recited in claims 15 and 16 except that the main cam lacks four extensions with two extensions formed on opposite sides of the main cam, as recited in the claims. See Figure 2 of Croft for the teaching that the second pawl includes first and second arms 42,43 and that the main cam is urged into the locked position by external spring 46. Pipon et al. show a recliner assembly similar to that of Croft wherein the main cam 26 (see Fig. 7) has a first arm 26a contacting a first locking cam 22, a second arm contacting an internal spring 28, a third arm 26b contacting a second locking cam 23, and a fourth arm contacting an internal spring 28. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the recliner assembly of Croft such that the main cam has a first and second extensions opposite to third and fourth extensions such that the first and third extensions contact the first and second locking cams and the second and fourth extension contact internal springs, such as the recliner assembly disclosed in Pipon et al. One would have been motivated to make such a modification in view of the suggestion in Pipon et al. that the main cam extension configuration provide first and third extensions engaging the locking cams

Art Unit: 3636

and urge the pawls into a locked position and provide second and fourth extensions biased by internal springs into the locked position.

Allowable Subject Matter

12. Claim 12 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The following patents are cited to further show the state of the art with respect to recliner assemblies:

U.S. Pat. No. 6,820,937 B1 to Esaki et al. U.S. Pat. No. 6,824,216 B2 to Uramichi
U.S. Pat. No. 6,883,869 B2 to Liu et al.

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph F. Edell whose telephone number is (571) 272-6858. The examiner can normally be reached on Mon.-Fri. 8:30am-5:00pm.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR.


Art Unit: 3636

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


JE

September 23, 2005


RODNEY B. WHITE
PRIMARY EXAMINER